

AMENDMENTS TO THE SPECIFICATION

In the Specification:

On page 4, line 31 through page 5, line 10, please insert the following substitute paragraph in the specification:

The advantages of the present invention are immediately obvious to the expert and particularly are to be seen in that, with these components, a closed foil completely protects the synthetic from infrared radiation, thus preventing any delamination. The peeling resistance, a [[gage]] gauge for the adhesive properties and vibration resistance, remains unchanged even after prolonged use, i.e. at higher temperatures, and thus can also be used at regions in vehicles which are subjected to particular exposure to heat. Furthermore, the present invention makes a low-cost production of the inventive components possible, in particular because the shaping process of the thermoplastic material and the fixing or attaching process of the metallic foil to this material can be accomplished in one single method step. Furthermore, it is not necessary to make any perforations, thus enabling a shorter manufacturing time. Therefore, the components according to the invention do not show any long-term signs of flaking or detachment, even under increased vibration or heat stress and thus, when used in vehicles, do not lead to an undesirable generation of noise.

On page 5, line 24 through page 6, line 27, please insert the following substitute paragraphs:

The heat-protected thermoplastic component 1 shown in FIG. 1 comprises a trough-shaped carrier layer 2 which is suitably formed according to its use. In the view shown, a metallic

foil 3 is inserted into this carrier layer 2. According to the invention, this foil 3 comprises a plurality of pocket folds 4 which mechanically couple the metallic foil 3 to the carrier layer 2. The carrier layer is preferably made of a glass fiber reinforced thermoplast (GMB) or a thermoplast filled with endless fibers (LFT). Suitable materials are well known to the expert. Products having endless fibers usually comprise endless fibers in loops or slings, but can also simply be filled with long fibers. The metallic foil is preferably made of aluminium and has a thickness of 0.01 to 0.1 mm. However, it is understood that this foil can be made of a different metallic material, and in particular of a thin steel sheetmetal and have a thickness of up to 0.5 mm. Alternatively, a heat resistant adhesive layer (hotmelt adhesive) can be provided between this metallic foil 3 and the carrier layer 2, or additional heat insulating or acoustically effective materials can be inserted. In a preferred embodiment, the metallic foil 3 has 1 to 5 inventive folding pockets 4 spaced every 10 to 30 mm. These folding pockets 4 can be differently dimensioned or arranged, according to their use requirements.

FIG. 2 shows a schematic view of a section through a heat-protected thermoplastic component 1 designed according to the invention. This has at least on one side a metallic foil 3, which, in the finished heat-protected thermoplastic component 1, should act as a heat reflecting foil. Aluminium is preferably used for this foil 3. This foil 3 is attached to a carrier layer 2 and comprises folding pockets 4 which are embedded in the carrier layer 2. These folding pockets 4 result from the forming process and are completely surrounded by the material of the carrier layer 2. The shaping of these folding pockets 4 leads to a tight coupling, i.e. a form-fitting or positive connection, between the metallic foil 3 and the carrier layer 2. These folding pockets are easily made by using knobbed or otherwise shaped foils for the forming process. According to the intended use, these folding pockets 4 can be differently dimensioned and/or arrayed by the expert. For the present invention it has proven to be particularly beneficial that, for this type of anchorage, the foil 3 does not have to be provided with perforations in order to be able to achieve

a positive connection. In particular, the anchorage regions 6, i.e. the regions having the folding pockets 4, are protected against the infrared radiation which damages the thermoplastic material of the carrier layer 2. For other purposes, e.g. acoustic purposes, the expert can, of course, provide the foil 3 with perforations and to use a different material for the carrier layer 2, or to provide a further intermediate layer between the metallic foil 3 and the carrier layer 2. It is thus at the discretion of the expert to include an intermediate layer, for example a hotmelt adhesive, a ceramic layer and/or an acoustically effective layer.

On page 7, lines 8-17, please insert the following substitute paragraph:

FIG. 3 is a graphical illustration of the measurement results to the peeling resistance W_s with different arrangements A, B, C. Here, W_s is understood to mean the ability of the metallic foil to bond to the thermoplastic carrier part, i.e. a ~~[[gage]]~~ gauge for the required energy per surface unit to separate the metallic foil 3 from the carrier layer 2. The values in area (I) pertain to arrangements which have not been subjected to an aging process, whilst the values in area (II) pertain to arrangements which have been subjected to temperatures of 140° C during a period of 1000 hours. The values A(I) and A(II) relate to an arrangement A, for which a conventional metallic hotmelt adhesive (MSK25) was used between an LFT-component and an aluminium foil. The measurement results show that no measurable adhesion was obtained.